

Typhoon Application Review

#1 PREREQUISITES

- High pressure coolant available
 - » Minimum 217psi (15 BAR) with 10L/min flow rate
- Small diameter cutting tools
 - » Max cutting tool Ø 4 mm; max shank Ø 7 mm
- Minimum coolant filtration level = 100 microns

#2 LIMITATIONS

- Finishing and semi-finishing operations
 - » Drilling, engraving, chamfering, slot, profile, and shoulder milling
- Minimum Typhoon spindle operating RPM
 - » 10% less than registered idle speed RPM

#3 CHECKLIST

- Ensure tool clearance
- Check Z-axis limitations
- Ensure water based emulsion or cutting oil, viscosity up to 20[Cp]
- With emulsion coolant, use an anti foaming additive suitable for emulsion to prevent foaming

#4 FIRST RUN

- Start Typhoon spindle, run for a minute, and record idle RPM
- Turn down feed rate override to 30% and begin program
- Increase feed rate as it's cutting until reaching 100% or until Typhoon RPM drops 10% from idle speed
- Record ending feed rate values and enter into program

#5 COMPLETE FORM

- All required parameter fields must be completed
- Fill in all parameters for the original machine spindle
- Leave the Typhoon spindle parameters and comment sections open for Technical Support Team use
- Email form to mas@ingersoll-imc.com



Typhoon Application Review Form

All required parameter fields must be completed.

Completed forms should be returned to mas@ingersoll-imc.com for review/approval.

Process Feedback Data		Images	
Ingersoll Field Sales Rep			
Name of End User			
Date of Test			
Machine Center Data			
Machine Brand/Model			
Spindle Adaptation			
Max. RPM			
Coolant Type			
Coolant Pump Pressure			
Filtration			
Flow Rate			
Adjustable Coolant?	Yes No [Required]		
Workpiece			
Material			
Hardness			
Machining Process			
Application Type (Drilling, profiling, engraving, grinding, slot milling, shoulder millinzg, etc)			
Operation/Tool Type (Ball nose, drill, thread mill, end mill, etc)			
Test Data	Existing Process (if applicable)	Typhoon	Comments
Cutting Tool Part Number			
Tool Overhang			
Cutting Tool Diameter - D			
Cutting Tool Shank Diameter			
Number Teeth - Z			
Depth of Cut - Ap			
Total Depth - TAp			
Cutting Width - Ae			
Spindle RPM - n (IDLE)			
Speed Drop			
Cutting Speed - Vc			
Feed per Tooth - Fz			
Feed - F			
Results			
Performance	Existing Process (if applicable)	Typhoon	Comments
Tool Life			
Cutting Time			
Surface Finish			
Cycle Time Improvement			